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ABSTRACT

Developed by the ABCs of Construction National Workplace Literacy Project, this fifth-grade level module teaches strategies for finding the meanings of compound words used in technical writing encountered by pipefitters. It also addresses working with words in context and finding definitions with a dictionary. Four exercises are provided. (YLB)

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MODULES OF INSTRUCTION DEVELOPED IN GRANT CYCLE

1. Writing Frames for Construction Workers (10 exercises)

for low-level readers; consists of 10 "paragraphs" with open-ended sentences for workers to complete and recopy in their notebooks. Topics deal with work and training, such as "My Job," "Classroom Behavior," and "Listening to Myself."

2. Writing About Your Craft (10 topics)

for all students; list of 10 topics, such as "My Boss," "The Main Beef About My Job," and "How Work Orders Are Delivered." Used for integrating reading and writing in a job-specific context.

3. Building Workplace Vocabulary for E & I: Structural Analysis (80 pages)
Building Workplace Vocabulary for Millwrights: Structural Analysis(79 pages)
Building Workplace Vocabulary for Pipefitters: Structural Analysis(79 pages)

5th grade level; teaches word attack skills for technical terms, utilizing word parts and root words; includes hints for retaining meanings by building card file with visual representations of terminology.

4. Building Workplace Vocabulary for E & I: General, Specialized, & Technical Terms (58 pages)
Building Workplace Vocabulary for Millwrights: General, Specialized & Technical Terms (29 pages)
Building Workplace Vocabulary for Pipefitters: General, Specialized, & Technical Terms (32 pages)

5th grade level; teaches different kinds of vocabulary words encountered in work-related texts; drills for remembering new words; tips for building vocabulary; some dictionary use.

5. Building Workplace Vocabulary for E & I: Compound Words (28 pages)
Building Workplace Vocabulary for Pipefitters: Compound Words (18 pages)
Building Workplace Vocabulary for Millwrights: Compound Words (22 pages)

5th grade level; strategies for finding the meanings of compound words used in technical writing; works with words in context

6. Improving Listening Skills: Hazards Communication (18 pages)
Improving Listening Skills: Fire Extinguishers (22 pages)

a viewing, study guide that accompanies a commercial training video used in the required 8-hour OSHA safety course; learning new words, main ideas, and drawing conclusions are covered.

7. Measuring Decimals: Millwright (28 pages)

instruction and application problems

8. Improving Study Skills/Test Taking (60 pages)

6th grade level; good study skills are needed for success in the ABC Training program; explores strategies for organizing class notes and study time; analysis sheet for determining weaknesses in test preparation; how to schedule to arrange study time and work time

Computer Program

"Math for Pipefitters" is an interactive, multi-media program that covers fractions, decimals, angles, and right triangle geometry in a pipefitting context (88 screens)

PIPEFITTER - COMPOUND WORDS 21 PAGES

<F1: Help>

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Statistics for:  B:\PIPECOMP.DOC

Readability Statistics
   Flesch Reading Ease:  79            Flesch-Kincaid Grade Level: 5
   Gunning's Fog Index:  8

Paragraph Statistics
   Number of paragraphs: 268           Average length:   0.5 sentences

Sentence Statistics
   Number of sentences:  137           Short (< 12 words):   109
   Average length:       9.8 words     Long  (> 30 words):   0
   End with '?':         24
   End with '!':         0

Word Statistics
   Number of words:      1409          Average length:       4.13 letters
                                       Syllables per word:   1.39
```

<Enter: Next Screen> <Esc: Done>

<F1: Help>

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Document Summary for:  B:\PIPECOMP.DOC

Readability Statistics      Interpretation

   Grade level:             Easy for most readers.
      5 (Flesch-Kincaid)

   Reading ease score:      This represents 6 to 10 years of schooling.
      79 (Flesch)

   Avg. sentence length:    May indicate choppiness or lack of sentence
      9.8 words             variation.  Try varying sentence length.

   Avg. word length:        Most readers could understand the vocabulary used
      1.39 syllables        in this document, based on syllables per word.

   Avg. paragraph length:   Avoid 1-sentence paragraphs in business or
      0.5 sentences         technical writing.
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<Enter: First Screen> <Esc: Done>

BUILDING WORKPLACE VOCABULARY FOR PIPEFITTERS: COMPOUND WORDS

OBJECTIVE: **To learn a system for finding the meanings of compound words.**

Consider the name of your craft: pipefitting. What does a pipefitter do? You might answer "fit pipes." Simply said, you describe the job you do by the name you give it.

This is true of many other words as well. That is, the two smaller words that make up the larger word define it. Such words are called **COMPOUND WORDS**. For example, think about the word ***screwdriver*** in the following sentence:

> The Phillips-head ***screwdriver*** has a point that tapers and is shaped like an "✖."

Screwdriver is a **COMPOUND WORD**. Many compound words appear in your text. Many of them will not be as common as ***pipefitter*** or ***screwdriver.*** Thus, you need a way to find their meanings. The following steps provide a way to do so.

STEP 1: Read the compound word. Find the two smaller words within it. Sometimes it helps to draw a line between the two.

STEP 2: Find the meaning of the first word. Sometimes you will know this. Other times you may need to use a dictionary or ask someone for help.

STEP 3: Find the meaning of the second word. Sometimes you will know this. Other times you may need to use a dictionary or ask someone for help.

STEP 4: Put the two meanings together. That is, say the first meaning and, without stopping, say the second meaning. This is the meaning of the compound word.

Think about the word ***screwdriver*** again. You already know what a screwdriver is. But, think for a minute, about the word itself. ***Screwdriver*** is a compound word. The smaller words that make it up are ***screw*** and

driver. A screw is a threaded metal piece. ***Driver*** means the person or thing which makes something go. A ***screwdriver,*** then, is the thing which makes a threaded metal piece move.

The meanings you get when you figure out compound words are not exact ones. Instead, they sometimes give only an idea of what the word means. Often, however, this is all you need to know.

❖

EXERCISE 1

Arlene needs to connect a pipe from an overhead pipe run to an underground storage tank. She plans to use a wrap around to help her make an exact cut. Her book provides the following information:

> A wrap around is used to lay out lines on a pipe for cutting. A mark is made on the pipe at ***centerline***. The wrap-around is placed on the pipe at this location and the edges of the wrap-around are lined up. The wrap-around should ***overlap*** itself. This insures a straight line. Then, using a piece of ***soapstone*** and a keel, a line is drawn around the pipe using the wrap-around as a guide.

1. What does ***centerline*** mean to you?

2. Draw a line between the two words that make up the word ***centerline***.

C E N T E R L I N E

3. Write the first small word on the line below. Then define it by using what you know or with a dictionary.

_____

_____

4. Write the second small word on the line below. Then define it by using what you know or with a dictionary.

_____

_____

5. Now write the two definitions side-by-side.

6. How is the meaning you wrote in #1 like the one you wrote in #5? How is it different?

7. What does ***overlap*** mean to you?

8. Draw a line between the two words that make up the word ***overlap***.

O V E R L A P

9. Write the first small word on the line below. Then define it by using what you know or with a dictionary.

_____

10. Write the second small word on the line below. Then define it by using what you know or with a dictionary.

_____

11. Now write the two definitions side-by-side.

_____

_____

12. How is the meaning you wrote in #7 like the one you wrote in #11? How is it different?

13. What does ***soapstone*** mean to you?

14. Draw a line between the two words that make up the word ***soapstone***.

S O A P S T O N E

15. Write the first small word on the line below. Then define it by using what you know or with a dictionary.

_____

_____

16. Write the second small word on the line below. Then define it by using what you know or with a dictionary.

_____

_____

17. Now write the two definitions side-by-side.

_____

_____

18. How is the meaning you wrote in #13 like the one you wrote in #16? How is it different?

EXERCISE 2

Cajun refinery needs to replace a steam loop. Jorge needs to connect a new control valve. The new valve requires oversized threads. He must cut these threads. He checks his text and finds the following:

> The last step in installing dies is to set the size mark on the size bar. If ***oversize*** or ***undersize*** threads are required, set the index line in direction of **OVER** or **UNDER** size mark on the size bar.

1. What does ***oversize*** mean to you?

_____

2. Draw a line between the two words that make up the word ***oversize***.

O V E R S I Z E

3. Write the first small word on the line below. Then define it by using what you know or with a dictionary.

_____

_____

4. Write the second small word on the line below. Then define it by using what you know or with a dictionary.

_____

_____

5. Now write the two definitions side-by-side.

_____

_____

6. How is the meaning you wrote in #1 like the one you wrote in #5? How is it different?

_____

_____

7. What does ***undersize*** mean to you?

_____

_____

8. Draw a line between the two words that make up the word ***undersize***.

U N D E R S I Z E

9. Write the first small word on the line below. Then define it by using what you know or with a dictionary.

_____

_____

10. Write the second small word on the line below. Then define it by using what you know or with a dictionary.

_____

_____

11. Now write the two definitions side-by-side.

_____

_____

12. How is the meaning you wrote in #7 like the one you wrote in #11? How is it different?

_____

_____

❖

EXERCISE 3

Morgan plans to use a torch to cut out a damaged section of steel pipe. He's concerned about the danger of using a torch. His text provides the following:

> If the torch flame goes out and the torch begins to hiss, shut off the gas supply to the torch immediately. This condition is known as ***flashback*** and could result in serious injury.

1. What does ***flashback*** mean to you?

_____

_____

2. Draw a line between the two words that make up the word ***flashback***.

F L A S H B A C K

3. Write the first small word on the line below. Then define it by using what you know or with a dictionary.

_____

_____

4. Write the second small word on the line below. Then define it by using what you know or with a dictionary.

_____

_____

5. Now write the two definitions side-by-side.

_____

_____

6. How is the meaning you wrote in #1 like the one you wrote in #5? How is it different?

_____

_____

7. What injury might occur?

_____

_____

❖

EXERCISE 4

Judy is new to pipefitting. Her company is installing a water system at a local refinery. Imagine her surprise when her boss asks her to check the make-up dimensions of the system. Judy's text provided a new definition of ***make-up***:

> ***Make-up*** (also called ***takeoff***) is a term used frequently in the piping trades. It refers to the dimensions of the fittings within a run of pipe. No matter how pipe is joined or from what material pipe is made, the pipefitter will always need to know the make-up dimensions of the fittings within the system.

1. What does ***takeoff*** mean to you?

_____

_____

2. Draw a line between the two words that make up the word ***takeoff***.

T A K E O F F

3. Write the first small word on the line below. Then define it by using what you know or with a dictionary.

_____

_____

4. Write the second small word on the line below. Then define it by using what you know or with a dictionary.

_____

_____

5. Now write the two definitions side-by-side.

_____

6. How is the meaning you wrote in #1 like the one you wrote in #5? How is it different?

_____

_____

7. Would ***make-up*** be an example of general, specialized, or technical vocabulary?

_____

❖ ❖